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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,091	03/08/2001	Yukihisa Takeuchi	789_068	8529

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EXAMINER

LESPERANCE, JEAN E

ART UNIT PAPER NUMBER

2674

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,091

Applicant(s)

TAKEUCHI ET AL.

Examiner

Jean E Lesperance

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 4-9 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-4 and 26-27, drawn to specific display element control means, classified in class 345, subclass 98.

Group II. Claims 5-6 and 28, drawn to display power source, classified in class 345, subclass 211.

Group III. Claims 7-12 and 29-30, drawn to intensity or color driving control, classified in class 345, subclass 609.

Group IV. Claims 13-15, 23-25, and 31, drawn to reflector having particular shape behind light source, classified in class 349, subclass 67.

Group V. Claims 16-22, drawn to light controlling display elements, classified in class 345, subclass 84.

2. The inventions are distinct, each from the other because:

Group I which is specific display element control means is functional on its own and does not need Groups II-V. Group II which is display power source can function independently from Groups I and III-V. Group III which is intensity or color driving control can function independently from groups I-II and IV-V. Group IV which is a reflector having particular shape behind light source is functional on its own and does not need any of the other Groups. Group V which is a light controlling display elements can function independently from Groups I-IV.

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-V, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Kevin Brown on 2-4-2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-4, 26, and 27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-25 and 28-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
6. Claims 1-4, 26, and 27 are presented for examination.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 26 are rejected under 35 U.S.C. 102 (b) as being unpatentable over U.S. Patent # 5,754,160 ("Shimizu et al.").

As for claim 1, Shimizu et al. teach an LCD panel Fig.2 (2) corresponding to a display; and if an animation image such as, such as that of a normal television receiver

is displayed on all over the LCD panel 2, both the first and second display area 21 and 22 are selected as the 2 alpha drive in order to make a sharp contrast. If the character image or a still image, such as of a wordprocessor and a personal computer, is displayed on all over the LCD panel 2, both the first and second display areas 21 and 22 are selected as the 1 alpha drive in order to make the outlines of characters clear (column 12, lines 24-40) corresponding to a display area-separating section for separating a display area of said display into a moving picture display area and a still picture display area.

As for claims 2 and 26, Shimizu et al. teach a control circuit 6 supplies display control signals to scanning circuit 3 and display data supply circuit 4, and supplies display data to the display data circuit 4 (column 4, lines 35-41) corresponding to said display is constructed by arranging a large number of display components; and an LCD panel Fig.2 (2) corresponding to a display a display; and if an animation image such as, such as that of a normal television receiver is displayed on all over the LCD panel 2, both the first and second display area 21 and 22 are selected as the 2 alpha drive in order to make a sharp contrast. If the character image or a still image, such as of a wordprocessor and a personal computer, is displayed on all over the LCD panel 2, both the first and second display areas 21 and 22 are selected as the 1 alpha drive in order to make the outlines of characters clear (column 12, lines 24-40) corresponding to said display area-separating section separates said display area of said display into said moving picture display area and said still picture display area on the basis of address data to indicate said display components.

As for claim 3, Shimizu et al. teach a scanning lines of the LCD panel 2 are connected to the output terminals of the common-side analog multiplexer 35, and the segment lines thereof are connected to the output terminals of the segment side analog multiplexer 41 (column 4, lines 56-59) corresponding to said display area-separating section is subjected to collective centralized control by a central facility connected to a network. It is inherent in the art to have a system connected to the network.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 27 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 5,754,160 ("Shimizu et al.") in view of U.S. Patent # 6,028,978 ("Takeuchi et al.").

As for claims 4 and 27, Shimizu et al. teach an LCD panel Fig.2 (2) corresponding to a display. Accordingly, Shimizu et al. teach all the claimed limitations as recited in claims 4 and 27 with the exception of providing an optical guide plate and a light source.

However, Takeuchi et al. disclose an optical waveguide plate Fig.1 (12) for introducing light 10 from a light and a light source Fig.1 (100) thereto, and a driving section 16 provided opposingly to the back surface of the optical waveguide plate 12

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and including a larger number of actuator elements 14 which are arranged corresponding to picture elements (column 6, lines 6-12) corresponding to said display is a display comprising an optical guide plate for introducing light from a light source there into, and a driving section provided opposingly to a first plate surface of said optical guide plate and arranged with actuator elements of a number corresponding to a large number of picture elements, wherein a screen image corresponding to an image signal is displayed on said optical guide plate by controlling a displacement action of said actuator element in a direction to make contact or separation with respect to said optical guide plate in accordance with an attribute of said image signal to be inputted so that leakage light is controlled at a predetermined portion of said optical guide plate.

It would have been obvious to utilize the optical waveguide plate and the light source as taught by Takeuchi et al. in the liquid crystal display device disclosed by Shimizu et al. because this would provide a display device which makes it unnecessary to switch light sources which can deal with the use of an actuator element having a slow response speed.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

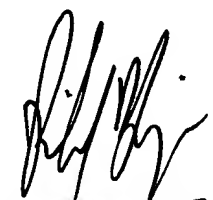
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



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Date 2-5-2003



RICHARD HJERPE
SUPERVISOR PATENT EXAMINER
TECHNOLOGY CENTER 2600